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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,026	11/30/2001	Gary Mitchell	9289-4	6808
20792	7590	10/04/2004		
MYERS BIGEL SIBLEY & SAJOVEC PO BOX 37428 RALEIGH, NC 27627			EXAMINER HWANG, VICTOR KENNY	
			ART UNIT 3764	PAPER NUMBER

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/998,026	Applicant(s) MITCHELL ET AL.	
	Examiner Victor K. Hwang	Art Unit 3764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☒ Claim(s) 5, 19, 23, 24, 28, 32 and 34 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>30011130</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the pair of support pads being forwardly of the seat (claims 1, 13, 24, 33 and 39); and the backrest defining a plane that forms an angle of between 75 and 95 degrees with the underlying surface (claims 5, 19, 28 and 34) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to because in Fig. 1, "61" presumably should be changed to --19--. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "41b". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing

figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities:

on page 5, line 16, the information needs to be updated;

on page 10, line 5, "33" presumably should be changed to --30--;

on page 8, line 2, "14b" presumably should be changed to --14c--; and

on page 8, line 33, "67" presumably should be changed to --68--.

Appropriate correction is required.

5. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the backrest defining a plane that forms an angle of between 75 and 95 degrees with the underlying surface.

Claim Objections

6. Claims 5, 19, 23, 24, 28, 32 and 34 are objected to because of the following informalities:

claims 5, 19, 28 and 34, line3 of each claim, after "95" the term --degrees-- presumably should be inserted;

claim 23, line 1, "13" presumably should be changed to --22--;

claim 24, line 7 of the second page, each occurrence of "cable" presumably should be changed to --belt--; and

claim 32, line 2, after "rotation" a comma --,-- presumably should be inserted.

Appropriate correction is required.

Claim Rejections - 35 USC § 102 and 103

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-11, 13-22, 24-31, 33-37 and 39-42 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over *Compound Position Curl Machine* ("Time Machines" by Nautilus, pgs. A-22, A-23 and A-28). The *Compound Position Curl Machine* discloses an exercise machine for exercising the arm muscles of a user and comprises a pairs of front and rear uprights rising from respective legs. An adjustable seat and angled backrest are mounted to the frame and configured to receive a

seated user. A pair of pads are mounted to the frame forwardly of the seat, each of the pads positioned to engage the upper arms of the seated user. A pair of movement arms units are pivotally interconnected with the frame and movable about generally horizontal axes of rotation, each of the arm units configured to engage a portion of the user's arms or hands, each movement arm unit movable between a retracted position, in which the seated user's arms are bent, and an extended position, in which the user's arms are extended.

The support pads and seat are oriented such that the user's upper arms are angled upwardly at an angle of at least 10 degrees with the user's elbows located on a respective axis of rotation. The front and rear uprights form a part of the frame that supports the pair of movement arm units. The front uprights have an outward V-shape. The rear uprights extend downwardly to the legs. The outward V-shape of the front uprights and rear uprights define vertical planes that form an angle therebetween, to orient the horizontal axes of the movement arm units at an angle relative to each other.

A weight stack provides resistance to movement of the movement arm units. Each movement arm unit comprises a cam that pivots about its respective axis of rotation and a belt attached to and engaging each cam. Each end of the belt engages a respective cam and is guided by pulleys such that a central portion of the belt engages a pulley mounted to the selector rod of the weight stack (pg. A-28).

The *Compound Position Curl Machine* does not disclose or make clear that the axes of rotation form an angle of between 115 and 155 degrees (claims 1 and 24); that the angle formed by the axes of rotation is between 135 and 145 degrees (claims 7, 15 and 30); that the backrest is angled between 75 and 95 degrees relative to an underlying surface (claims 5, 19,

28 and 34); that the vertical planes define an angle of between about 20 and 70 degrees (claims 8, 13, 31 and 39); and that the vertical planes define an angle of between 35 and 45 degrees (claims 9, 14 and 40).

It is not disclosed whether the angle formed by the vertical planes of the front and rear uprights is within the range of 20 to 70 degrees or between 35 and 45 degrees, but it is certainly close to being within that range. If it is not, it would have been a matter of design choice to orient the front uprights between 20 and 70 degrees with respect to one another or between 35 and 45 degrees, since the angle between the vertical planes defines the angle between the axes of rotation of the movement arm units and the plane within which the movement arm units operate. and one having ordinary skill in the exercise art would orient the front uprights to satisfy desired exercise parameters for effectiveness and comfort.

The axes of rotation of the pair of movement arm units form an angle therebetween and is a function of the angle between the vertical planes formed by the front and rear uprights. The angle between the axes of rotation is not disclosed, but from simple geometry, the angle therebetween would fall within the range of 115 and 155 degrees or between 135 and 145 degrees given that the angle between the vertical planes would be within the range of 35 to 45 degrees.

The backrest is clearly shown as angled relative to the supporting floor beneath the machine (page A-28) and would seem to fall within the angular range of 75 to 95 degrees. If it is not within the range of 75 to 95 degrees, it would have been an obvious matter of design choice to one having ordinary skill in the exercise art to orient the backrest at an angle of between 75 and 95 degrees for the comfort and positioning of the user.

10. Claims 12, 23, 32 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Compound Position Curl Machine* (Time Machines by Nautilus, pgs. A-22, A-23 and A-28) in view of *Habing et al.* (US Pat. 5,897,467). The *Compound Position Curl Machine* has been discussed above, and such discussion is incorporated herein. The *Compound Position Curl Machine* discloses the invention as claimed except for the movement arm units comprising a lever arm attached to each cam and a handle pivotally interconnected to the lever arm to engage one of the forearm and hand of the user, the axis of rotation of the handle relative to the lever arm being substantially parallel to the axis of rotation of the cam relative to the frame.

Habing et al. discloses an arm muscle exercise machine comprising a pair of relatively angled movement arm units 16,18. Each arm unit includes a lever arm 36 and a handle 34,30 pivotally interconnected to the lever arm to engage the hand of the user, the axis of rotation of the handle 35 relative to the lever being substantially parallel to the axis of rotation 40 of the lever arm relative to the frame. Note that the movement arm units move within planes that are angled relative to each other at approximately 40 degrees (Figs. 2 and 7). The handle being pivotal relative to the lever allows for automatic adjustment to compensate for various forearm lengths of various users (col. 2, lines 41-44).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the movement arm units of the *Compound Position Curl Machine* with the pivotal handles of *Habing et al.*, in order to automatically compensate for the various forearm lengths of various users.

11. Claims 24-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Compound Position Curl Machine* (Time Machines by Nautilus, pgs. A-22, A-23 and A-28) in view of *Ish, III et al.* (US Pat. 5,378,216). The *Compound Position Curl Machine* has been discussed above, and such discussion is incorporated herein. The *Compound Position Curl Machine* discloses the invention as claimed except for a second belt connecting the weight stack to a floating pulley assembly engaging the first belt (claim 24). The movement arm units are independently movable utilizing a common resistance source. The pulley mounted to the selector rod of the weight stack permits each movement arm unit to move independently. It is well known in the exercise art that a floating pulley functions equivalently.

Ish, III et al. discloses in Fig. 4 an equivalent pulley arrangement for providing independent movement to a pair of arm units. A first belt 66 has ends attached to the movement arm units and a central portion engaged with a floating pulley assembly 67. A second belt 70 has one end fixed to the floating pulley assembly and a second end secured to the weight stack 71. Therefore, because these two pulley arrangements were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute a floating pulley assembly and second belt as shown in *Ish, III et al.* for the pulley fixed to the selector rod of the weight stack of the *Compound Position Curl Machine*.

12. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Compound Position Curl Machine* (Time Machines by Nautilus, pgs. A-22, A-23 and A-28) in view of *Ish, III et al.* (US Pat. 5,378,216) as applied to claim 24 above, and further in view of *Habing*

et al. (US Pat. 5,897,467). The *Compound Position Curl Machine* as modified by *Ish, III et al.* discloses the invention as claimed except for the movement arm units comprising a lever arm attached to each cam and a handle pivotally interconnected to the lever arm to engage one of the forearm and hand of the user, the axis of rotation of the handle relative to the lever arm being substantially parallel to the axis of rotation of the cam relative to the frame.

Habing et al. has been discussed above, and such discussion is incorporated herein. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the movement arm units of the *Compound Position Curl Machine* as modified by *Ish, III et al.* with the pivotal handles of *Habing et al.*, in order to automatically compensate for the various forearm lengths of various users.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lundgren (US Pat. 4,722,522), *Jones et al.* (US Pat. 5,421,796), *Habing et al.* (US Pat. 5,803,882), *Karasawa et al.* (US Pat. Pub. 2002/0058572 A1) and *Close* (GB 2,223,686 A) disclose exercise machines for exercising the arm muscles of users.

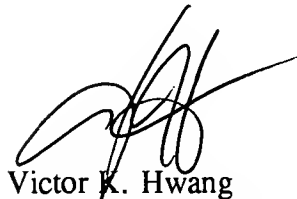
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor K. Hwang whose telephone number is (703) 308-2865 until Nov. 2, 2004. After Nov. 2, the new telephone number will be (571) 272-4976. The examiner can normally be reached Monday through Friday from 7:30 AM to 4:00 PM Eastern time.

The facsimile number for submitting papers directly to the examiner for informal correspondence is (703) 746-4891 until Nov. 2, 2004. After Nov. 2, the new informal fax

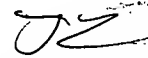
number will be the same as my telephone number, (571) 272-4976. The facsimile number for submitting all formal correspondence at this time is (703) 872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine R. Yu can be reached on 703-308-2675.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Victor K. Hwang
September 30, 2004



JUSTINE R. YU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

9/30/04